

05-10-06

AR/17w

USSN 10/615,746



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/615,746 Confirmation No. 9889
Applicant (s) : James L. Haas
Filed : July 9, 2003
TC/A.U. : 1733
Examiner : Yao
Title : USE OF A LOW BINDER FIBER MAT WITH A SUPPORT MAT
FOR FABRICATING A FIBER REINFORCED POLYMERIC
FOAM COMPOSITE

Docket No. : 62146A
Customer No. : 00109

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE, WITH SUFFICIENT POSTAGE, AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231, On May 9, 2006 DATE OF DEPOSIT Amber K. Mobley PRINT OR TYPE NAME OF PERSON SIGNING CERTIFICATE SIGNATURE OF PERSON SIGNING CERTIFICATE May 9th 2006 DATE OF SIGNATURE

Assistant Commissioner for Patents
Washington, D.C. 20231

REPLY BRIEF per 37 CFR 41.41(a)(1)

Status of Claims begin on page 2.

Grounds of Rejection to be Reviewed on Appeal begins on page 3.

Arguments begin on page 4.

STATUS OF CLAIMS

Claims 1-13 and 20 stand rejected under 35 USC 103 as being obvious over Londrigan (US 5,837,743) in view of Hoffman (US 4,804,425).

Claims 14-16 are allowable upon withdrawn rejections in the Examiner's Answer of 18 April 2006.

Claims 17-19 were previously cancelled.

GROUND OF REJECTION TO BE REVIEWED ON APEAL

Appellant seeks review of the rejection of Claims 1-13 and 20 as being obvious over Londrigan in view of Hoffman.

ARGUMENTS

Appellant wishes to supplement their original Appeal Brief with the following arguments in order to address issues in the Examiner's Answer to the Appeal Brief. The present Reply Brief is in accordance with 37 CFR 41.41(a)(1).

Claim 1 Issues

The Examiner proposes that Appellant is "misconstruing" Examiner's position in regards to Hoffman and Londrigan.

Respectfully, Appellant does find Examiner's response to Appellant's arguments somewhat confusing and may be misunderstanding it. On the last 9 lines of page 8 in the Answer the Examiner appears to develop an argument justifying how the teachings of Hoffman "would have suggested to one in the art that, [sic] one could effectively and interchangeably supply a low binder fiber mat and a support mat as a composite in a single feeding roll or feeding them using two separate feeding roles into a belt-press laminator to form a laminate form a composite." (page 8, lines 16-20 of Answer, underlining added). Yet, on page 9 of the Answer, the Examiner proposes that Appellant is "misconstruing" Examiner's position: "Nowhere in Examiner's office action has Examiner equates [sic] the meshwork web (e.g. non-woven web) of Hoffman to a low binder fiber mat." (page 9, lines 6-9 of Answer). Yet, Appellant finds their conclusion consistent with Examiner's conclusion quoted from the prior page.

The only other interpretation Appellant can draw from the arguments is that: (1) Hoffman does not teach low-binder fiber mat but rather only a process illustrating feeding stock from two feed rolls independently or from a single stock as a laminate, (2) that Londrigan teaches a low-binder fiber mat and finally (3) that the Examiner argues Londrigan's mat is obviously effective in the process options of Hoffman. Such a conclusion is attenuated from the teaching of the references and further strained in view of the unique character of low-binder fiber mat (*see, e.g.,* page 6 of Appellants Brief) and problems associated with incorporating low-binder fiber mat into such processes (*see, e.g.,* pages 7-8 of Appellant's Brief). In view of the uniqueness of low-binder fiber mat and these difficulties, it is not readily apparent how to implement a low-binder fiber mat from Londrigan into the process of Hoffman

with an expectation of success. Appellant identified the source of the problems associated with low-binder fiber mat and developed a solution articulated in the present Claims. Neither cited reference identifies these problems or their source.

The Examiner proposes that the problem identified by Appellants would be evident to on-line users (page 10 of Answer). That may be true for those users who actually implement low-binder fiber mat. However, there is no evidence that any such operators existed at Appellant's date of invention (perhaps due to the difficulty of implementing low-binder fiber mats). Even if they did exist, there is no evidence that the operators had identified the "source" of the problem as opposed to the problem itself. It is identification of the "source" of a problem that is key to inventiveness. The Examiner offers no evidence of any on-line operator who would have observed the problems, and particularly the source of the problems associated with implementing low-binder fiber mat into a foaming process such as those in Hoffman and Londrigan.

For these reasons, in combination with those in the Appeal Brief, Appellant believes Claim 1 and those Claims depending from Claim 1 are patentable over Hoffman and Londrigan.

Claim 2 Issues

The Examiner's Answer fails to address why Claim 2 lacks patentability over the cited references. Perhaps Examiner thought Claim 2 stood or fell with Claim 1. Appellant did fail to address Claim 2 under the GROUPING OF CLAIMS section of their Appeal Brief. However, Claim 2 is conspicuously absent from that section (*e.g.*, it does not specify Claim 2 stands or falls with Claim 1). Additionally, the ARGUMENTS section clearly states that Claim 2 is patentable for the reasons of Claim 1 and additionally for requiring fibers to be "substantially distributed" within the resulting foam. (*see*, page 9 of Appellant's Appeal Brief). Therefore, it should be apparent in the Appeal Brief that Claim 2 stands or falls independent of Claim 1.

Claim 2 requires that the fibers from the low binder fiber mat become substantially distributed in the polymeric foam. As noted in the Appeal Brief, "substantially distributed" has particular definition on page 10, lines 9-17 of the present Application.

The Examiner claims that requisite fiber dispersion naturally flows from the teaching of Hipchen (US 4,028,158; column 3, lines 39-42) incorporated into Londrigan. However, Appellant respectfully disagrees. The section of Hipchen that the Examiner quotes addresses "the mixture" ... not the foam ... as having fibers substantially evenly therethrough. The mixture is a foamable mixture that, after being compressed into the fiber mat per teaching on column 3, lines 39-42 is allowed to expand into foam (*see*, column 3, lines 39-44). An inherent lack of uniformity in fiber distribution in the final foam is evident from the very next paragraph, which recommends stretching the fiber mat to break fibers in order to improve fiber distribution (*see*, column 3, lines 49-55). Even so, there is no indication that fiber uniformity is achieved throughout the foam – or, more particularly, that the fibers become "substantially distributed" within the foam. As such, Appellant believes that Claim 2 is further patentable over the cited references for requiring the fibers to be substantially distributed throughout the foam.

Remaining Issues

For remaining issues, Appellant relies on arguments in their Appeal Brief.

Respectfully submitted,



Steven W. Mork
 Registration No. 48,258
 Phone: (989) 636-8434

P. O. Box 1967
 Midland, MI 48641-1967

akm